

Permit No. : AK-002254-3
Application No. : AK-002254-3

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Clean Water Act,
33 U.S.C. §1251 et seq., as amended by the Water Quality Act of
1987, P.L. 100-4, the "Act",

Municipality of Anchorage
Eagle River Wastewater Treatment Facility

is authorized to discharge from a facility located at 11024
Artillery Road, Eagle River, Alaska, to receiving waters named
Eagle River, at the following location:

<u>Outfall Serial Number</u>	<u>Latitude</u>	<u>Longitude</u>
001	61° 19' 10" N	149° 35' 30" W

in accordance with discharge point(s), effluent limitations,
monitoring requirements and other conditions set forth herein.

This permit shall become effective May 12, 1995

This permit and the authorization to discharge shall expire
at midnight, May 12, 2000

Signed this 12th day of April, 19 95.

Chuck Findley
Director, Water Division, Region 10
U.S. Environmental Protection Agency

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I. EFFLUENT LIMITATIONS	
A. During the period beginning on the effective date of this permit, the permittee is authorized to discharge from outfall 001, subject to the restrictions set forth herein. This permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application, or any pollutants that are not ordinarily present in such waste streams.	
B. The monthly average flow rate of effluent discharged from the wastewater treatment facility shall not exceed 2.5 mgd.	
C. There shall be no discharge of floating solids, visible foam or oily wastes which produce a sheen on the surface of the receiving water.	
D. The following effluent limits shall apply as maxima at all times:	

Table 1 - Effluent Limitations

<u>Effluent Characteristic</u>	<u>Unit of Measurement</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>
Biochemical Oxygen Demand (BOD ₅)	mg/l lb/day	30 625	45 938	60 1251
Total Suspended Solids (TSS)	mg/l lbs/day	30 625	45 938	60 1251
Fecal Coliform ¹	#/100 ml	20	---	---
Chlorine Residual	mg/l	---	---	ND ²

pH standard units In the range of 6.5 -
8.5

¹ The geometric mean of all samples collected during the calendar month shall not exceed 20 FC/100 ml, and not more than 10% of the samples during any calendar month shall exceed 40 FC/100 ml.

² Based on the amperometric method of analysis, the chlorine residual shall be below the detection limit of 10 µg/l.

E. Percent removal requirements for BOD₅ and TSS are as follows: for any month, the monthly average effluent load shall not exceed 15 percent of the monthly average influent load.

Percent removal of BOD₅ and TSS shall be reported monthly on the Discharge Monitoring Reports (DMRs). For both BOD₅ and TSS, the monthly average percent removal shall be calculated from the arithmetic mean of the influent values and the arithmetic mean of the effluent values for that month.

F. The following effluent limits shall apply as maxima from June 1 through September 30:

Table 2 - Effluent Limitations

<u>Effluent Characteristic</u>	<u>Unit of Measurement</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	
Copper ¹	μg/l	120	---	175	
Lead ¹	μg/l	34	---	50	
Total Ammonia, as N		mg/l	17	---	36

¹ Metals limits are expressed as total recoverable metals.

G. The following effluent limits shall apply as maxima from October 1 through May 31:

Table 3 - Effluent Limitations

<u>Effluent Characteristic</u>	<u>Unit of Measurement</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	
Copper ¹	µg/l	69	---	100	
Lead ¹	µg/l	20	---	29	
Total Ammonia, as N		mg/l	10	---	21

¹ Metals limits are expressed as total recoverable metals

II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS

A. Monitoring Requirements

- During the period beginning on the effective date of this permit, and lasting until the expiration, the following monitoring requirements shall apply:

Table 4 - Effluent Monitoring Requirements

<u>Effluent Sample Parameter</u>	<u>Sample Location</u>	<u>Frequency</u>	<u>Sample Type</u>
BOD ₅ (mg/l, lb/day)	Influent & Effluent	Weekly	24-hr. composite
TSS (mg/l, lb/day)	Influent & Effluent	Weekly	24-hr. composite

Fecal Coliform	Effluent	5/month ¹ Bacteria (#/100 ml)	
Chlorine Residual ($\mu\text{g/l}$)	Effluent	Continuous ²	Recording ₃
pH	Effluent	5/week	Grab
Copper ⁴ ($\mu\text{g/l}$)	Effluent	Quarterly ⁵	24- hr. composite
Lead ⁴ ($\mu\text{g/l}$)	Effluent	Quarterly ⁵	24- hr. composite
Total Ammonia (mg/l N)	Effluent	1/month	24- hr. composite
Average Monthly Flow (mgd)	Influent or Effluent	Continuous	Recording
Maximum Monthly Flow (mgd)	Influent or Effluent	Continuous	Recording
Temperature ($^{\circ}\text{C}$)	Effluent	5/week	Grab
Chronic Toxicity (TU_C) 6	Effluent	Quarterly ⁵	24- hour composite
Acute Toxicity (TU_A) 6	Effluent	See Part II. B.	24- hour composite

Table 4 - Effluent Monitoring Requirements (Cont)

¹ Sample collection shall be evenly spaced throughout the month.

² Residual chlorine monitoring is required only when the chlorine disinfection system is in use.

- ³ The amperometric or spectrophotometric method of analysis with a method detection limit of 10 $\mu\text{g/l}$ or less shall be used. If the analysis shows non-detectable levels, the permittee shall report "0" on the DMR.
- ⁴ Metals shall be analyzed and reported as total recoverable metals.
- ⁵ Results of analyses shall be reported with the discharge monitoring report (DMR) for the last month in the calendar quarter during which monitoring occurred (i.e., the March, June, September, and December DMRs).
- ⁶ See Part II. B.

2. Effluent samples shall be collected after the last treatment unit prior to discharge.
3. Influent and effluent composite samples shall be collected during the same 24-hour period.

B. Toxicity Testing Program Requirements

Chronic Toxicity Testing

1. The permittee shall conduct chronic toxicity testing for determining the toxicity of the effluent from outfall 001 in accordance with paragraphs 1 through 7 and 15 through 25 below.
2. Beginning with the first calendar quarter after the effective date of this permit, the permittee shall conduct quarterly chronic toxicity tests. After one year of testing, if the maximum measured toxicity is less than or equal to 1.2 TU_c , monitoring shall be reduced to one additional test during the third year of the permit.
3. The following tests shall be conducted:

Pimephales promelas (fathead minnow), larval survival and growth test.

Ceriodaphnia dubia, three-brood, 7-day survival and reproduction test.

Static renewal or flow through toxicity test systems may be used.

4. All test organisms and procedures for the above tests shall be in accordance with *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Third Edition* (EPA/600/4-91/002).
5. Concurrent testing with reference toxicants must be conducted. Both the reference toxicant and effluent tests must meet all test acceptability criteria as specified in the manual in paragraph 4., above. If test acceptability is not achieved, the permittee must retest as soon as possible.
6. The permittee shall identify and report the following endpoints:
 - the no observable effect concentration (NOEC)
 - chronic toxic units (TU_c)
 - the IC_{25}
 - the LC_{50} , if acute toxicity is demonstrated, calculated as defined in paragraph 14., below.
7. Chronic toxic effects will be demonstrated if there is a statistically significant difference in response between the control and test organisms for either toxicity test at dilutions greater than or equal to 5.8:1 between October 1 and May 31 or greater than or equal to 11:1 between June 1 and September 30.

Acute Toxicity Tests

8. The permittee shall conduct acute toxicity testing for determining the toxicity of the effluent from outfall 001 in accordance with paragraphs 9 through 25, below.
9. The permittee shall conduct two tests during the term of this permit. The first test shall be conducted during the first calendar quarter of 1996 and the second test shall be conducted during the first calendar quarter of 1998.
10. The following acute toxicity test shall be conducted:

Oncorhynchus kisutch (coho salmon), 96-hour LC_{50} .

Static renewal or flow through toxicity test systems may be used.

11. All procedures for the above tests shall be in accordance with the protocol for *Oncorhynchus mykiss* in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fourth Edition)*, EPA/600/4-90/027.
12. Testing must be conducted with concurrent reference toxicant tests. Both the reference toxicant and effluent tests must meet all test acceptability criteria specified in the manual in paragraph 11., above. If test acceptability is not achieved, the permittee must retest as soon as possible.
13. The permittee shall calculate and report the following:
 - LC_{50} of the effluent and 95 percent confidence limits, using an internally consistent scheme based on the moving average angle, probit, or graphical methods, as appropriate
 - acute toxic units (TU_A)
 - the EC_{50} , if appropriate.
14. Acute toxic effects will be demonstrated if the LC_{50} is less than or equal to 5.8 percent

between October 1 and May 31 or less than or equal to 11 percent between June 1 and September 30.

Both Types of Test

15. Samples shall be taken after the last treatment unit prior to discharge. For static renewal testing, samples must be 24-hour composite.
16. All quality assurance and statistical analyses shall be in accordance with *Quality Assurance Guidelines for Biological Testing*, EPA/600/4-78-043, *Quality Assurance Bibliography*, EPA/600/4-89/001, and other EPA Region 10 approved protocols.
17. Each test shall consist of at least 6 dilutions, including 100%, 11%, and a control (0%), with a minimum of four replicates per concentration.
18. Dilution water and control water used in the tests shall be standard dilution water or uncontaminated receiving water, unless otherwise approved by EPA.
19. For static renewal testing, the effluent water used in the toxicity tests must be renewed daily. However, a fresh 24-hour composite sample need only be collected every other day (i.e., days 1, 3, and 5 for chronic testing and days 1 and 3 for acute testing).
20. Acute testing shall be timed so that it will be conducted on a split sample of the effluent used for conducting the chronic tests. In addition, a split of the sample collected for day one of the chronic tests shall be analyzed for the chemical and physical parameters in Part II.A.1. of this permit.
21. Toxicity test results shall be reported with the DMR for the last month of the quarter in which testing is conducted (i.e., with the DMRs for March, June, September, December).

22. Copies of all toxicity test results shall also be submitted to Alaska Department of Fish and Game, Habitat and Restoration Division, 333 Raspberry Road, Anchorage, AK 99518, within 30 days of test completion.
23. Reports of toxicity testing results shall include all relevant information outlined in Section 9, Report Preparation, in *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms - Third Edition* (EPA-600/4-91/002). The permittee shall include (1) the results of the test(s), (2) the dates of sample collections and initiation of each toxicity test, (3) plant flow rate, (4) results of chemical specific testing performed in conjunction with the toxicity test(s), and (5) all raw data and statistical analyses from the tests, including reference toxicant data.
24. If acute or chronic toxic effects are demonstrated, the permittee shall, within 15 days:
 - (a) Conduct 3 chronic or acute tests, as appropriate, on a bi-weekly basis.
 - (b) Notify EPA and ADEC of the times and dates when toxicity was detected.
25. If none of the tests in paragraph 23(a) demonstrate toxic effects, the permittee shall continue toxicity testing in accordance with the schedule in paragraphs II.B.2. and II.B.9, above.
26. If any of the tests in paragraph 23(a) demonstrate toxicity, the permittee shall submit to EPA and ADEC, within 15 days, a plan for addressing the toxicity, including an expeditious schedule for conducting a toxicity identification/reduction evaluation (TIE/TRE) in accordance with EPA manuals *Toxicity Identification Evaluations: Characterization of Chronically Toxic Effluents, Phase 1* (EPA 600/6-91/005F, May

1992) and *Toxicity Reduction Evaluation Protocols for Municipal Wastewater Treatment Plants* (EPA 600/2-88/062, April 1989) or any subsequent revisions.

C. Ambient Monitoring Program

1. Within 180 days of the effective date of this permit, the permittee shall submit to EPA and Alaska Department of Environmental Conservation (ADEC) a study plan to determine the concentrations of total recoverable copper, lead, silver, and zinc in the Eagle River upstream from the permittee's discharge.
2. The objective of this study is to determine whether the total maximum daily loads (TMDLs) for metals should be changed, based on information on ambient metals concentrations.
3. At a minimum, the study plan shall propose quarterly sampling for one year in at least 4 locations, with 3 replicates per location.
4. The study plan shall address the following issues:
 - a. appropriate sampling locations to determine natural conditions (as defined by the State of Alaska at 18 AAC 70.110) and ambient concentrations immediately upstream from the permittee's discharge
 - b. temporal and spatial variability in ambient conditions
 - c. appropriate sampling and analytical methods, including clean techniques, if necessary
 - d. quality assurance/quality control for sampling and analysis
 - e. analytical variability.
5. The permittee shall implement the study within 30 days of approval of the plan by EPA and ADEC.

6. If, based upon the results of the study, a new total maximum daily load (TMDL) is developed which results in the need for more stringent effluent limits, this permit may be reopened to adjust the limits accordingly.

D. Representative Sampling. Effluent samples taken in compliance with the monitoring requirements established under Part II.A. shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

E. Reporting of Monitoring Results. Monitoring results shall be summarized each month on the Discharge Monitoring Report (DMR) form (EPA No. 3320-1). The reports shall be submitted monthly and are to be postmarked by the 10th day of the following month. Legible copies of these, and all other reports, shall be signed and certified in accordance with the requirements of Part V.E., Signatory Requirements, and submitted to the Director, Water Division and the State agency at the following addresses:

original to:

United States Environmental Protection Agency (EPA)

1200 Sixth Avenue, WD-135
Seattle, Washington 98101

copy to:

Alaska Department of Environmental Conservation
(ADEC) Southcentral Region
3601 'C' Street, Suite 1334
Anchorage, Alaska 99503

F. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

G. Additional Monitoring by the Permittee. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be

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included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.

H. Records Contents. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

I. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application or until the expiration of this permit. This period may be extended by request of the Director or ADEC at any time. Data collected on-site, copies of Discharge Monitoring Reports, and a copy of the current NPDES permit must be maintained on-site during the duration of activity at the permitted location.

J. Twenty-four Hour Notice of Noncompliance Reporting.

1. The following occurrences of noncompliance shall be reported by telephone within 24 hours from the time the permittee becomes aware of the circumstances:
 - a. Any noncompliance which may endanger health or the environment;

- b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part IV.G., Bypass of Treatment Facilities.);
 - c. Any upset which exceeds any effluent limitation in the permit (See Part IV.H., Upset Conditions.); or
 - d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit to be reported within 24 hours.
2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
- a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected; and
 - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
3. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Compliance Section in Seattle, Washington, by phone, (206) 553-1213.
4. Reports shall be submitted to the addresses in Part II.E., Reporting of Monitoring Results.
- K. **Other Noncompliance Reporting.** Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.B. are submitted. The reports shall contain the information listed in Part II.J.

L. Notice of New Introduction of Pollutants. The permittee shall provide adequate notice to the Director, Water Division and ADEC of:

1. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 or 306 of the Act if it were directly discharging those pollutants; and
2. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.
3. For the purposes of this section, adequate notice shall include information on:
 - a. The quality and quantity of effluent to be introduced into such treatment works; and
 - b. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.

M. Planned Changes. The permittee shall give notice to the Director and ADEC as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29(b); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Part II.L.

N. Anticipated Noncompliance. The permittee shall also give advance notice to the Director and ADEC of any planned changes in the permitted facility

or activity which may result in noncompliance with permit requirements.

0. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit (Part III.A.) shall be submitted no later than 10 days following each schedule date.

III. SPECIAL CONDITIONS

A. Sludge Management Requirements

During the period beginning on the effective date of this permit, and lasting until permit expiration, the following requirements apply:

1. The permittee shall handle and dispose of sewage sludge in such a manner so as to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which may be present in the sludge.
2. The permittee shall comply with all existing federal and state laws and regulations that apply to its sewage sludge use and disposal practice(s), and with all future standards promulgated under Section 405(d) of the Clean Water Act of 1987.
3. Sludge from the Eagle River Wastewater Treatment Facility (the generator) may be transferred to the John M Asplund Water Pollution Control Facility (the recipient) for processing and disposal only in accordance with the provisions of 40 CFR §503, the requirements of this permit, and the requirements of the John M Asplund Water Pollution Control Facility NPDES permit (No. AK-002255-1).
4. The permittee must ensure that the use or disposal of the Eagle River Wastewater Treatment Facility sludge is in accordance with the requirements of 40 CFR §503. Efforts to ensure compliance shall include, but not be limited to, the following elements:
 - a. The permittee shall prepare a contingency plan within 18 months of the effective date of this permit. The contingency plan shall include:
 - (i) An estimate of the maximum duration of any period when the John M Asplund Water Pollution Control Facility incinerator may be unavailable for sludge disposal; and
 - (ii) Options for sludge storage, use, or disposal, sufficient to cover the estimated maximum duration of any period when the

incinerator may be unavailable. These options must be in accordance with the provisions of 40 CFR §503.

The plan shall be fully implemented within 36 months of the effective date of this permit. The dates of plan completion and implementation shall be reported on the DMR.

- b. The permittee shall manage the sludge feedstock to prevent harm to the public health or environment and to ensure compliance with 40 CFR §503 by the generator and recipient of the sludge.

This permit may be reopened to incorporate additional limits to prevent violations of 40 CFR §503, or harm to the environment or public health, due to feedstock mismanagement.

- c. Sludge may not be transferred to the incinerator at the John M Asplund Water Pollution Control Facility, or any other recipient, at times when the sludge disposal practices at the recipient facility are not in compliance with paragraph III.A.2., above, or any current or future sludge conditions in this permit or the recipient facility's permit.
- d. Sludge delivery shall be suspended or discontinued upon receipt of written instructions from EPA. If any other appropriate authority submits a written request to the sludge generator or recipient to suspend or cease any activities associated with sludge management, the permittee shall deliver a copy of this request to EPA within 12 hours of receiving the request. The term "appropriate authority" includes any federal, state, or local agency with regulatory authority over sludge management at either the generator or recipient facility.

The permittee may only resume delivery of sludge upon receipt of written authorization from EPA.

- 5. Within 24 months of the effective date of this permit, the permittee shall discontinue the

practice of discharging sludge from the Eagle River Wastewater Treatment Plant directly into the Anchorage sewer system. After that time, sludge from the Eagle River Wastewater Treatment Plant shall not be transferred in such a way as to enter the sewage flow into or through any other wastewater treatment facility. The Eagle River Wastewater Treatment Plant sludge may be discharged directly into the sludge handling or processing works at the John M. Asplund Water Pollution Control Facility. Incidental return flows from sludge processes are not considered direct discharges to the sewage flow for the purposes of this section. The permittee shall submit a report to EPA within 30 days after permanently discontinuing the practice of discharging sludge into the Anchorage sewer system.

6. The permittee shall conduct annual sampling for beryllium, mercury, arsenic, cadmium, chromium, lead, and nickel as follows:
 - a. The sampling method shall be representative of production on the day of sampling, and the number and timing of samples shall be representative of the quantity and quality of the sludge generated over the year.
 - b. The sewage sludge shall be sampled at or immediately before the point of discharge into the sludge transport vehicle, or at or immediately before the point of discharge from the transport vehicle to the recipient facility.
 - c. Sampling protocol shall follow procedures outlined in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, 2nd Edition (1982) with Updates I (April 1984) and II (April 1985) and 3rd Edition (November 1986) with Revision I (December 1987). Analytical protocols shall be in accordance with 40 CFR §503.8.
 - d. Results of sludge sampling shall be reported as total metal for each metal in mg/kg dry weight. The first annual report shall be submitted with the appropriate DMR no later than one year from the effective date of this permit.

7. The permittee shall submit annual reports 12 and 24 months after the effective date of this permit describing the progress made toward preparation and implementation of the contingency plan, preparation of the feedstock control plan, and changing the point sludge discharge to the John M Asplund facility. The reports shall be due with the DMR for those months.
8. If the volume of sludge produced by the Eagle River Wastewater Treatment Plant exceeds 290 metric tons per year (dry weight basis), sampling frequency shall increase according to the requirements of 40 CFR §§503.16 and 503.8.
9. The permittee shall notify the EPA 180 days prior to changing the sludge management practice, except for short-term implementation of the contingency plan in paragraph III.A.4.a. of this permit. Under 40 CFR §122.62(a)(1), any changes in sludge disposal methods is cause for modification of the permit. It is cause for revocation and reissuance of the permit if the permittee requests or agrees.
10. Upon request, the permittee shall provide EPA with sludge inventory data as part of an EPA or state inventory update.

B. Quality Assurance Plan

Within 180 days of the effective date of this permit, the permittee shall submit a quality assurance plan to EPA for review and approval. This plan shall include the following items:

1. Sampling techniques (field blanks, replicates, duplicates, control samples, etc.);
2. Sample preservation methods;
3. Sample shipments procedure;
4. Instrument calibration procedures and preventive maintenance (frequency, standards, spare parts); and
5. Qualification and training of personnel.

IV. COMPLIANCE RESPONSIBILITIES

- A. Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- B. Penalties for Violations of Permit Conditions.**
1. **Civil Penalty.** The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be subject to a civil penalty, not to exceed \$25,000 per day for each violation.
 2. **Criminal Penalties:**
 - a. **Negligent Violations.** The Act provides that any person who negligently violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or by both.
 - b. **Knowing Violations.** The Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be punished by a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or by both.
 - c. **Knowing Endangerment.** The Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act, and who knows at that time that he thereby places another person in imminent danger of

death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this subparagraph, be subject to a fine of not more than \$1,000,000.

- d. **False Statements.** The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both.

Except as provided in permit conditions in Part IV.G., Bypass of Treatment Facilities and Part IV.H., Upset Conditions, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

- C. **Need to Halt or Reduce Activity not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with

the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Removed Substances. Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

G. Bypass of Treatment Facilities.

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this section.

2. Notice:

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.J., Twenty-four Hour Notice of Noncompliance Reporting.

3. Prohibition of bypass.

a. Bypass is prohibited and the Director or ADEC may take enforcement action against a permittee for a bypass, unless:

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- b. The Director and ADEC may approve an anticipated bypass, after considering its adverse effects, if the Director and ADEC determine that it will meet the three conditions listed above in paragraph 3. a. of this section.

H. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;

- b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required under Part II.J., Twenty-four Hour Notice of Noncompliance Reporting; and
 - d. The permittee complied with any remedial measures required under Part IV.D., Duty to Mitigate.
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- I. Toxic Pollutants. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

V. GENERAL PROVISIONS

- A. Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- B. Duty to Reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.
- C. Duty to Provide Information.** The permittee shall furnish to the Director and ADEC, within a reasonable time, any information which the Director or ADEC may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director or ADEC, upon request, copies of records required to be kept by this permit.
- D. Other Information.** When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director or ADEC, it shall promptly submit such facts or information.
- E. Signatory Requirements.** All applications, reports or information submitted to the Director and ADEC shall be signed and certified.

 - 1. All permit applications shall be signed as follows:

 - a. For a corporation: by a responsible corporate officer.
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
 - c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Director or ADEC shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Director and ADEC, and
 - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
3. Changes to authorization. If an authorization under paragraph IV.H.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph IV.H.2. must be submitted to the Director and ADEC prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there

are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- F. Availability of Reports.** Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Director and ADEC. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.
- G. Inspection and Entry.** The permittee shall allow the Director, ADEC, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:
1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.
- H. Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.
- I. Property Rights.** The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury

to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

- J. Severability.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- K. Transfers.** This permit may be automatically transferred to a new permittee if:
1. The current permittee notifies the Director at least 30 days in advance of the proposed transfer date;
 2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- L. State Laws.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

VI. DEFINITIONS

- A. Acute Toxic Unit (TU_A) is a measure of acute toxicity. The number of acute toxic units in the effluent is calculated as $100/LC_{50}$, where the LC_{50} is measured in percent effluent.
- B. Administrator means the Administrator of the USEPA, or an authorized representative.
- C. Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- D. Chronic Toxic Unit (TU_C) is a measure of chronic toxicity. The number of chronic toxic units in the effluent is calculated as $100/NOEC$ where the $NOEC$ is measured in percent effluent.
- E. Daily discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- F. Daily maximum discharge limitation means the highest allowable daily discharge.
- G. Director means the Director of Water Division, EPA Region 10, or an authorized representative.
- H. EC_{50} is a point estimate of the effluent concentration that would cause an observable adverse effect (such as death, immobilization, or serious incapacitation) in 50 percent of the test organisms exposed.
- I. Dry weight means calculated on the basis of having been dried at $105^{\circ}C$ until reaching a constant mass (i.e., essentially 100 percent solids content).
- J. EPA means the United States Environmental Protection Agency.

- K. Grab sample means a single sample or measurement taken at a specific time or over as short a period of time as is feasible.
- L. IC_{25} is a point estimate of the effluent concentration that would cause a 25 percent reduction in a nonlethal biological measurement of the test organisms, such as reproduction or growth.
- M. LC_{50} is a point estimate of the effluent concentration that would be lethal to 50 percent of the test organisms exposed over a specific time period.
- N. Monthly average discharge limitation means the highest allowable average of "daily discharges" over a calendar month. For fecal coliform bacteria, this shall be calculated as the geometric mean of all samples collected during the calendar month. For all other parameters, the average monthly discharge shall be calculated as the sum of all "daily discharges" divided by the number of "daily discharges" measured during the month.
- O. The no observable effect concentration (NOEC) is the effluent concentration in control water at which there is no statistically significant difference (at the 95 percent confidence level) in survival, growth, or reproduction between the control and test organisms.
- P. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- Q. Sewage sludge is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

- R. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- S. Weekly average discharge limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.
- T. 24-hour composite sample means a flow-proportioned mixture of not less than 8 discrete aliquots. Each aliquot shall be grab sample of not less than 100 ml and shall be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.